

# Trends In Amplification

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## From the Editor

Welcome back to *Trends in Amplification*.

Previous subscribers may have noticed a slightly different look than in the past. This change reflects a concomitant change in publisher and editor. As the new editor, I would like to take this opportunity to thank the former editor, Michael Valente, for his four years of service, which brought many interesting and timely topics to the pages of *Trends*. I would also like to take this opportunity to introduce a few changes. First, I would like to acknowledge our newly expanded editorial board. In addition to our past board of experts including Robin Cox, David Fabry, Francis Kuk, Carol Sammeth, and Robert Sweetow; we have added Ruth Bentler, Laurel Christensen, Pamela Souza, and Hans Verschuure. We will certainly benefit from the expertise of these outstanding clinicians, researchers, and scholars during the peer review process. A second change relates to the format of the journal. In the past, the editorial board of *Trends in Amplification* has endeavored to provide concise, yet comprehensive overviews of timely topics in audiology. In accordance with this goal, each issue contained a single tutorial authored by a recognized authority in the area. Now, in addition to tutorials, select future issues will contain a second article, or a group of articles so that we may provide additional cutting edge research, a counterpoint to information provided in the tutorial, or manufacturers' perspectives related to the topic of focus. For example, an upcoming issue dedicated to new advances in probe microphone testing will also include a section dedicated to manufacturers' perspectives related to test signals and probe microphone evaluation of advanced hearing aids (including those using digital signal processing). It is our belief that such additional articles will enhance the comprehensive treatment of specific topics.

Finally, since I am also new to *Trends in Amplification*, I would like to take this opportunity to briefly introduce myself. I have been an assistant professor in the department of Hearing and Speech Sciences at Vanderbilt University and Director of the Dan Maddox Hearing Aid Research Laboratory since June of 1999. I received a B.S. in Speech and Hearing Science from the University of Iowa in 1989 and then stayed to complete a Masters degree in

1991. After spending some time working as a clinical Audiologist I returned to the University of Iowa for doctoral study, which I completed in 1995. Prior to moving to Nashville I spent a year as a visiting professor at the University of Iowa, and three years as an assistant professor at Purdue University.

My research interests are focused in the areas of amplification, hearing aid processing and clinical audiology. I have long been interested in the clinical implications of research, and have always been a believer that almost all the research that audiologists and hearing scientists perform has some clinical applications or implications; though sometimes we have to delve below the surface for the connection. One puzzling question I have often faced both as a clinician and a researcher is the disparate amplification needs that are sometimes exhibited by two individuals with hearing impairment whom appear identical in terms of standard audiologic test battery results. In this case I am referring to those patients who actually reveal aided performance/benefit differences measured objectively, rather than those patients who differ only in terms of perception of benefit or degree of satisfaction. Some very interesting and exciting work is being done looking at the impact of factors such as personality and expectations on wearers' perception of benefit and satisfaction. Given the magnitude of these factors, it seems likely that they may have at least as much importance as many audiologic factors when it comes to the satisfaction of our patients with amplification. This topic will be examined extensively in a future issue of *Trends in Amplification*.

Large differences in aided, objective, test results occurring across supposedly similar patients, fit with the same hearing aids, can be confusing to the clinician, perhaps even leading us to doubt our own abilities. Our ability to predict, with some degree of accuracy, the relative benefit a particular patient is likely to receive across amplification schemes is crucial when making decisions relative to optimal amplification parameters for our patients. While some amount of failure to make accurate predictions is expected given the significant individual differences we know to exist, any additional information that allows us to predict relative hearing aid benefit with more accuracy will certainly help in our decision making

process. In this issue of *Trends In Amplification*, the impact that regions of inner hair cell loss may have on speech recognition and hearing aid fitting decisions are discussed. As a bonus, a clinically viable tool developed for the assessment of these “auditory dead regions” is described. While these are certainly complex issues, we are lucky to have Brian Moore describe his research and views on inner hair cell loss, including its clinical quantification and impact on hearing aid fitting decisions. Dr. Moore has been involved with research in this area for a number of years and has recently developed a clinical tool for the assessment of “auditory dead regions”.

Brian Moore received his B.A. in Natural Sciences in 1968 and his Ph.D. in Psychoacoustics in 1971, both from the University of Cambridge, England. He is currently Professor of Auditory Perception at the University of Cambridge. He has been a Visiting Professor at Brooklyn College, the City University of New York, and the University of California at Berkeley and was a van Houten Fellow at the Institute for Perception Research, in Eindhoven, the Netherlands. His research

interests are: the perception of sound; mechanisms of normal hearing and hearing impairment; relationship of auditory abilities to speech perception; design of signal processing schemes for sensorineural hearing loss; methods for fitting hearing aids to the individual; as well as the design and specification of high-fidelity sound-reproducing equipment. He is a Fellow of the Acoustical Society of America and an Honorary Fellow of both the Belgian Society of Audiology and the British Society of Hearing Aid Audiologists. He is a member of the Experimental Psychology Society (U.K.), the British Society of Audiology, the American Speech-Language Hearing Association, the American Auditory Society, the Acoustical Society of Japan, the Audio Engineering Society and the Association for Research in Otolaryngology. He is President of the Association of Independent Hearing Healthcare Professionals. He has published 9 books and over 300 scientific papers and book chapters.

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